IN THE CLAIMS:

Please amend claims 1, 4-9, and 11-14 as follows.

1. (Currently Amended) A device for measuring usage of system resources in a communication network, the device comprising:

means for measuring which radio resources are used by a transmission in a system, wherein the transmission is a communication session that represents a logical association between a terminal and at least one of a plurality of network entities;

means for measuring which data service units are used for the transmission in the system; and

means for measuring which transmission characteristics are used by the transmission in the system, wherein all of the means for measuring are adapted for performing respective collective measurement.

2. (Previously Presented) The device according to claim 1, wherein said transmission characteristics comprise an information transfer capability information.

3. (Previously Presented) The device according to claim 1, further comprising means for evaluating, detecting and identifying respective dependencies of said system resource usage by evaluating measurement results of said means for measuring.

4. (Currently Amended) The device according to claim 1, wherein said device is part of a switching center of ~~said~~ the communication network.

5. (Currently Amended) The device according to claim 1, wherein said device is part of a base-station subsystem of ~~said~~ the communication network.

6. (Currently Amended) The device according to claim 1, wherein ~~said~~ the transmission contains high speed circuit switched data.

7. (Currently Amended) The device according to claim 1, wherein ~~said~~ the transmission contains data which is channel coded according to Enhanced Data rates for GSM Evolution.

8. (Currently Amended) A method for measuring a usage of system resources in a communication network, the method comprising measuring parameters of circumstances of a transmission in a system, wherein the transmission is a communication session that represents a logical association between a terminal and at least one of a plurality of network entities, said parameters being at least radio resources used by ~~said~~ the transmission in a system, data service units used for ~~said~~ the transmission in a system, and transmission characteristics used by ~~said~~ the transmission in a system, wherein said measuring is carried out collectively.

9. (Currently Amended) The method according to claim 8, wherein ~~said~~ the transmission characteristics comprise an information transfer capability information.

10. (Previously Presented) The method according to claim 8, further comprising detecting and identifying respective dependencies of system resource usage.

11. (Currently Amended) The method according to claim 8, wherein ~~said~~ the measurements are carried out in a switching center of ~~said~~ the communication network.

12. (Currently Amended) The method according to claim 8, wherein ~~said~~ the measurements are carried out in a base-station subsystem of ~~said~~ the communication network.

13. (Currently Amended) The method according to claim 8, wherein ~~said~~ the transmission contains high speed circuit switched data.

14. (Currently Amended) The method according to claim 8, wherein ~~said~~ the transmission contains data which is channel coded according to Enhanced Data rates for GSM Evolution.

15. (Previously Presented) A method for dimensioning system resources for a usage by transmissions in a system, the method comprising:

determining circumstances of transmissions as well as changes in circumstances of transmissions in a system;

calculating separately for each transmission circumstance an intensity of data traffic in a communication network from reservation times of data service units used by transmissions and from release times of transmissions;

considering a change of a radio channel configuration by updating the calculation performed separately for each transmission circumstance;

determining dependencies based upon results of measurements, determinations and calculations;

generating statistics based upon results of measurements, determinations and calculations; and

processing generated statistics for dimensioning system resources for usage by transmission in the system.

16. (Previously Presented) The method according to claim 15, wherein calculations are performed separately for each parameter corresponding to transmission circumstances as well as to a change of transmission circumstances.